



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

JUN 17 2013

OFFICE OF
COMPLIANCE AND ENFORCEMENT

Reply to: OCE-127

Certified Mail Number 7012 1010 0003 2872 5652
Return Receipt Requested

J. Wayne Maxie, R.G.
Manager, Environmental Projects
Agrium US, Inc.
4582 S Ulster Street Suite 1700
Denver, CO 80237-2641

Re: Source of Release(s) Impacting Monitoring Well A-34
Nu-West Industries, Soda Springs, Idaho
Idaho Facility, EPA ID #: IDD 000 466 888

Dear Mr. Maxie:

I had indicated in writing to Nu-West Industries ("Nu-West") on at least two occasions that EPA had concerns with the adequacy of the evaluations conducted at sumps, tanks, and at other suspect areas in attempting to locate the source(s) of fluids contributing to the low pH at the A-34 monitoring well location, and that EPA would be responding. This letter provides that response.

As an initial matter, EPA's interest in the protection of groundwater resources is due to their migratory properties and providing for the beneficial use of that resource wherever practicable. The very close proximity of the Source Water Assessment Area, three year time of travel delineation zone, for the City of Soda Springs to the A-34 location highlights EPA's concern.¹

EPA and the Idaho Department of Environmental Quality (IDEQ) have reviewed information provided by Nu-West with respect to actions taken to locate the source(s) of fluids contributing to the low pH at the A-34 monitoring well location², the A-34 Lateral Assessment Report dated April 3, 2013, as well as more recent monitoring data. Based upon this review, it appears that there are ongoing releases into the soil within the vicinity of the A-34 location, causing degradation of groundwater resources.

Nu-West has in the past suggested that the presence of low pH fluid at the A-34 location is attributable to precipitation and snowmelt. The elevated temperature of the shallow fluids near the monitoring well A-34 location is indicative of a fresh source of fluids associated with manufacturing and / or waste management operations, and not snow-melt or precipitation during the winter months. The very existence of shallow fluids at depths of five to ten feet below ground surface and above the basalt layer is also evidence of additional releases of fresh fluids to this area. Such shallow depth fluids have not been reported elsewhere by Nu-West beyond the A-34 Lateral Assessment area, despite many investigatory soil borings last year. To date, the only area where Nu-West has reported the presence of fluid at the shallow zone anywhere at the facility has been within the vicinity of the A-34 location.

¹ <http://www.deq.idaho.gov/water/swaOnline/LogIn.aspx>

² Emails from Hunton & Williams to US EPA dated November 30, 2012 and March 15, 2013

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EPA and IDEQ do not believe that adequate steps have been taken by Nu-West to address the source(s) impacting the area near the A-34 location. For example, Nu-West's November 30, 2012 response included an inspection and sampling summary table reporting the results of external inspections, internal inspections, and sampling of various sumps and tanks. The summary table stated that for the following sumps, the sump phosphate and sulfate concentrations cannot account for A-34 chemistry:

- SA Railcar Unloading Sump
- SA Tank Farm Sump
- SA Process Sewer Sump
- SA Cooling Basin Sump
- North Sulfuric Utility Sump
- TK 26 Containment Sump
- TK 28 Containment Sump

A sample of fluid obtained from the A-34 monitoring well in December 2012 reportedly measured 21,200 mg/l sulfate. Given that sulfuric acid is manufactured and managed near this location, this suggests a causality link between those manufacturing units above that manage sulfuric acid and the subsurface fluid found in the A-34 monitoring well.

The summary table reports that other sumps and tanks were inspected; however no inspection information concerning the seven sumps listed above was provided. It is unclear as to why Nu-West failed to inspect these seven units, given the obvious potential for management of low pH fluids and sulfuric acid in particular.

During an EPA inspection in August 2012, a missing portion of concrete in a low-lying section of the SA Railcar Unloading Sump was identified. Fluid was observed dripping from the bottom of the sulfuric acid railcar and directly into the sump. Nu-West personnel were present during EPA's inspection of that sump and also witnessed this condition. However, Nu-West's November 2012 response failed to notice this obvious defect. There may very well be other less visible defects causing releases of waste fluids at the SA Railcar Unloading Sump and at other locations. EPA provided the enclosed photographs of the sulfuric acid railcar unloading sump to Nu-West subsequent to the August 2012 inspection.

During the same EPA inspection in August 2012, fluid dripping from piping to the ground was observed at the exterior of one of the sulfuric acid plants. EPA provided the enclosed photograph to Nu-West subsequent to the August 2012 inspection. It shows wet soil beneath the piping systems at the sulfuric acid plant.

Nu-West has in the past suggested that the presence of the low pH fluid at the A-34 location is potentially attributable to a release from Tank 27 in 1993. EPA has evaluated this information. Based on Nu-West's August 20, 1993 letter response to the State of Idaho that the spill was contained and neutralized, the 1993 incident does not appear to be a credible explanation for the current groundwater conditions at the A-34 monitoring well location. A copy of the August 20, 1993 letter is enclosed.

In short, we do not believe that all steps have been taken that can be taken to both locate and to stop releases to the soil area near the A-34 location.

Nu-West likely has access to manufacturing process monitoring data (i.e. containment vessel fluid levels, temperatures, pressures, volumes, etc.) that could assist it in determining potential sources of fluid leaks. It may also be possible to isolate process equipment and to perform discrete pressure tests or static fluid level tests on those systems. There may also be operator observations or internal company email communications that could serve to help identify the source of the low pH fluids. Evaluation of this information and conducting tests could help Nu-West to identify the source(s) of fluids and to reduce the magnitude of a groundwater remediation solution.

EPA, IDEQ, and Nu-West participated in a conference call on May 31 and Nu-West provided a verbal update of different repairs and inspections performed on processing equipment. It is our understanding that these actions have not identified any significant releases of fluids to the subsurface.

EPA is concerned that Nu-West's inadequate response to identify the source(s) for the low pH and other contaminants in the groundwater near the A-34 location and its failure to stop those sources is causing an ongoing endangerment to groundwater resources. EPA requests that Nu-West report to EPA what steps the company will take to address this problem and a time frame for doing so.

Lastly, the A-34 Lateral Assessment Work Plan includes a requirement to conduct pumping tests within the vicinity of the A-34 monitoring well. The schedule deadline to complete those tests was March 29, with a pumping test report submittal to EPA and IDEQ due by April 12. We agreed this past March in Boise to delay those tests. Completion of the pump tests and reporting the data to both EPA and IDEQ is one of the steps that must be taken to address the release of low pH fluids at the A-34 location. As we discussed during the May 31 conference call, Nu-West is anticipating commencing the pump tests during the week of June 24. EPA requests that Nu-West provide a firm schedule for completion of the pump tests and for reporting the data to EPA and IDEQ.

Thank you for your attention to this important matter.

Sincerely,



Peter Magolske
Air and RCRA Compliance Unit

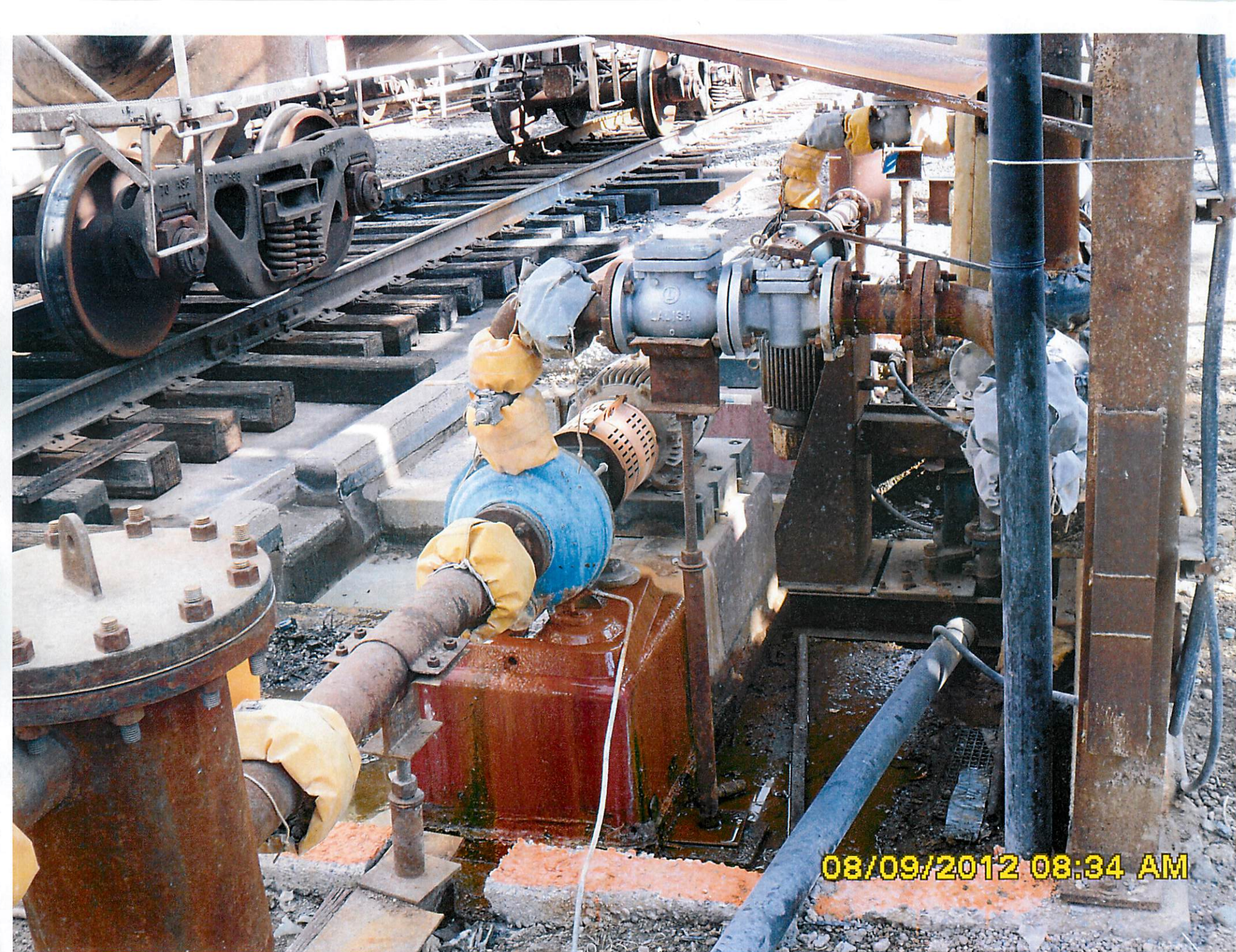
enclosures

cc: Brian Monson, Idaho Department of Environmental Quality
P. Scott Burton, Esq. Hunton and Williams LLP
Timothy J. Carlstedt, Esq. Hunton and Williams LLP





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AUG 23 1993

DIVISION OF
ENVIRONMENTAL QUALITY
END

August 20, 1993

Mr. Dave Hull
Water Quality Compliance officer
Idaho Division of Environmental Quality
224 South Arthur
Pocatello, Idaho 83204

RE: June 28, 1993 Acid leak/spill

Dear Dave,

The following information outlines the sulfuric acid spill experienced at our facility on June 28, 1993. As we talked about earlier, this is to update your files as to the actual spill and subsequent remediation efforts.

The acid leak was discovered at about 11:30 pm on the 28th near sulfuric acid storage tank # 27. It was suspected that the floor of the tank was leaking and the sulfuric acid was surfacing through the ground immediately adjacent to the tank.

The tank was drained by pumping the acid contents into another storage tank and sulfuric acid train cars. Residual acid and sludge remaining in the tank were neutralized with a sodium carbonate solution, and the neutralized material was drained to the phosphoric acid plant's process wastewater/gypsum sump.

When empty, the tank floor was removed to inspect the soil beneath the tank. Inspection of the soil beneath the tank revealed that the tank had not in fact been leaking. Further investigation unearthed a corroded down-leg of a pipe used to measure tank level to be the real culprit for the leak. This down-leg pipe was located outside the tank with the bottom section below grade. At this point is where the corrosion occurred, causing the acid to leak from the tank. The down-leg pipe measuring system was eliminated, and the tank floor was replaced.

While all this mechanical investigation and repair was taking place, soil sample pH was determined around the spill site to a depth of 36 inches. Results showed that the acid absorption into surrounding soil was minimal. Minor excavation and treatment with natural limestone was performed.

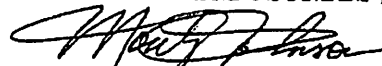
The spill itself (about 200 tons acid) was directed into a secondary containment ditch while being neutralized with soda ash and limestone.

D. Hull, IDEQ, August 20, 1993, page 2.

In short, the operators and supervisors involved in this incident worked diligently to correct the problem. Their efforts minimized possible contamination to the surrounding environment. The tank was refurbished to a condition better than before the leak and necessary remediation was performed in a timely manner.

If you need additional information please feel free to call me at (208) 547-4381.

Sincerely,
NU-WEST INDUSTRIES, INC.



Monty Johnson
Environmental Manager